

I. Amendments to the Claims:

This listing of claims replaces without prejudice all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A telecommunication architecture comprising:  
a network for carrying subscribers' communications between terminals;  
a plurality of software terminal agents executing on said network, such that each terminal is associated, on a one-to-one basis, with a corresponding software terminal agent for managing communications with that terminal according to that terminal's capabilities; and

a plurality of subscriber agents executing on said network, such that for each subscriber there is at least one uniquely associated subscriber agent, each said subscriber agent being configurable to point to at least one of said software terminal agents, such that a subscriber can establish a communication over said network from a terminal associated with a software terminal agent pointed to by that subscriber's subscriber agent.

2. (Currently Amended) A switch for interconnecting a network and a plurality of terminals, the switch comprising:

a plurality of subscriber line interfaces for connection to the terminals;

a network interface for connection to the network; and

a controller interconnecting said subscriber line interfaces and said network, said controller being operable to execute a plurality of software terminal agents and a plurality of subscriber agents, such that for each subscriber there is at least one uniquely associated subscriber agent, each said subscriber agent being configurable to point to at least one of said software terminal agents, each terminal, which is connected to a subscriber line interface, being associated, on a one-to-one basis, with a corresponding software terminal agent for managing communications with that terminal according to that terminal's capabilities and so that said switch may interconnect a network connected to said network interface with a terminal connected to one of said subscriber line interfaces so as to allow a subscriber whose subscriber agent points to the software terminal agent associated with that terminal to conduct a communication over the network from that terminal.

3. (Previously Presented) The switch according to claim 2 wherein said terminals include a telephone.

4. (Previously Presented) The switch according to claim 2 wherein said terminals include a rich-featured telephone having a graphical display.

5. (Previously Presented) The switch according to claim 2 wherein said terminals include a wireless telephone and said switch is a wireless base station.

6. (Previously Presented) The switch according to claim 2 wherein said terminals include a pager.

7. (Previously Presented) The switch according to claim 2 wherein said terminals include a personal digital assistant.

8. (Previously Presented) The switch according to claim 2 wherein said terminals include a voicemail server.

9. (Previously Presented) The switch according to claim 2 wherein said terminals include a point-of-purchase terminal.

10. (Previously Presented) The switch according to claim 2 wherein said network comprises the PSTN.

11. (Previously Presented) The switch according to claim 2 wherein said network comprises the Internet.

12. (Previously Presented) The switch according to claim 2 wherein each said subscriber agent includes said associated subscriber's name.

13. (Previously Presented) The switch according to claim 2 wherein each said subscriber agent includes a set of calling features belonging to said associated subscriber.

14. (Previously Presented) The switch according to claim 13 wherein said calling features are accessible by said subscriber at any terminal to which said associated subscriber agent points.

15. (Original) The switch according to claim 13 wherein said calling features include at least one of caller-id, call waiting, speed calling, call privacy, visual call waiting, and call privacy.

16. (Previously Presented) The switch according to claim 13 wherein said calling features include call forwarding, which is implemented by configuring said subscriber agent to point to a desired terminal agent.

17. (Currently Amended) A computer-readable medium encoded with a software structure, the software structure being executable on a switch for interconnecting a network and a plurality of terminals, and the software structure comprising:

a plurality of software terminal agents, such that each terminal is associated, on a one-to-one basis with a corresponding software terminal agent for managing communications with that terminal according to its capabilities; and,

a plurality of subscriber agents, such that for each subscriber there is at least one uniquely associated subscriber agent, each said subscriber agent being configurable to point to at least one of said software terminal agents so that a subscriber can establish a communication over said network from a terminal associated with said software terminal agent pointed to by that subscriber's subscriber agent.

18. (Currently Amended) The ~~software-structure~~ medium according to claim 17 wherein said terminals include a telephone and wherein said communication is a voice telephone call.

19. (Currently Amended) The ~~software-structure~~ medium according to claim 17 wherein said terminals include a personal computer.

20. (Currently Amended) The ~~software-structure~~ medium according to claim 17 wherein said terminals include a wireless telephone and said switch is a wireless base station.

21. (Currently Amended) The ~~software-structure~~ medium according to claim 17 wherein said terminals include a pager and wherein said communication includes a paging message.

22. (Currently Amended) The ~~software-structure~~ medium according to claim 17 wherein said terminals include a personal digital assistant.

23. (Currently Amended) The ~~software structure~~ medium according to claim 17 wherein said terminals include a voicemail server.

24. (Currently Amended) The ~~software structure~~ medium according to claim 17 wherein said terminals include a point-of-purchase terminal and wherein said communication includes a purchase authorization.

25. (Currently Amended) The ~~software structure~~ medium according to claim 17 wherein said network includes the PSTN and said switch includes a PSTN gateway.

26. (Currently Amended) The ~~software structure~~ medium according to claim 17 wherein said network includes the Internet.

27. (Currently Amended) The ~~software structure~~ medium according to claim 17 wherein each said subscriber agent includes said associated subscriber's name.

28. (Currently Amended) The ~~software structure~~ medium according to claim 17 wherein each said subscriber agent includes a set of calling features belonging to said associated subscriber.

29. (Currently Amended) The ~~software structure~~ medium according to claim 28 wherein said calling features are accessible by said subscriber at any terminal capable of supporting said features and to which said associated subscriber agent points.

30. (Currently Amended) The ~~software structure~~ medium according to claim 28 wherein said calling features include at least one of caller-id, call waiting, speed calling, call privacy, visual call waiting, and call privacy.

31. (Currently Amended) The ~~software structure~~ medium according to claim 28 wherein said calling features include call forwarding, which is implemented by pointing said subscriber agent to a desired terminal agent.

32. (Currently Amended) A method for setting up an incoming call to a subscriber comprising the steps of:

receiving a request to establish said call with said subscriber;

selecting a software terminal agent uniquely associated with a single terminal for managing communications according to said terminal's capabilities and pointed to by a subscriber agent uniquely associated with said subscriber, each software terminal agent being associated, on a one-to-one basis, with a corresponding terminal, such selection based upon behaviour criteria with which said subscriber agent is programmed; and

connecting said call to said terminal associated with said selected software terminal agent.

33. (Currently Amended) A method of associating a subscriber with a terminal comprising the steps of:

receiving a request from a subscriber to be associated with a terminal;  
determining, from an identification of the subscriber and from a single software terminal agent uniquely associated with the terminal, any restrictions on the use of the terminal by the identified subscriber, each software terminal agent being associated, on a one-to-one basis, with a corresponding terminal; and

if the restrictions permit use of the terminal by the subscriber, then modifying a subscriber agent uniquely associated with the identified subscriber so that it points to the software terminal agent.

34. (Previously Presented) The method according to claim 32 further comprising the step of:

providing calling features for said subscriber at said terminal in accordance with calling features listed in said associated subscriber agent.

35. (Currently Amended) A method for setting up an outgoing call by a subscriber from a terminal comprising the steps of:

receiving a request to establish said call from said terminal;  
identifying the call as being made through a software terminal agent that is a single software terminal agent uniquely associated with said terminal for managing communications according to that terminal's capabilities and that is pointed by a



subscriber agent uniquely associated with said subscriber, each software terminal agent being associated, on a one-to-one basis, with a corresponding terminal; and

connecting said call so as to provide calling features for the subscriber at the terminal in accordance subscriber's calling features included in said subscriber agent that are available at said terminal.

Claims 36-38 (Cancelled).

39. (Previously Presented) The method according to claim 32 wherein said terminals include a telephone.

40. (Previously Presented) The method according to claim 32 wherein said terminals include a personal computer.

41. (Previously Presented) The method according to claim 32 wherein said terminals include a wireless telephone.

42. (Previously Presented) The method according to claim 32 wherein said terminals include a pager.

43. (Previously Presented) The method according to claim 32 wherein said terminals include a personal digital assistant.

44. (Previously Presented) The method according to claim 32 wherein said terminals include a voicemail server.

45. (Previously Presented) The method according to claim 35 wherein said terminal is a point-of-purchase terminal and wherein said communication includes a purchase authorization.

46. (Previously Presented) The method according to claim 32 wherein each subscriber agent includes said associated subscriber's name.

47. (Original) The method according to claim 34 wherein said calling features include at least one of caller-id, call waiting, speed calling, call privacy, visual call waiting, and call privacy.

48. (Previously Presented) The method according to claim 34 wherein said calling features include call forwarding.

49. (Previously Presented) The architecture according to claim 1, wherein said subscribers include an individual.

50. (Previously Presented) The architecture according to claim 1, wherein said subscribers include a subscriber which represents a group of persons.

51. (Previously Presented) The architecture according to claim 50, wherein said group includes corporation.

52. (Previously Presented) The architecture according to claim 50, wherein said group includes a technical assistance center.

Claim 53 (Cancelled).

54. (Previously Presented) The method according to claim 32 wherein said subscribers include a subscriber which represents a group of persons.

55. (Previously Presented) The architecture according to claim 50 wherein said group includes a collection of network operators.

56. (Previously Presented) The architecture according to claim 50 wherein said group includes a '911' call center.

Claims 57-58 (Cancelled).

59. (Previously Presented) The architecture according to claim 1, wherein said subscriber agent is identifiable by said associated subscriber's telephone number.

60. (Original) The method according to claim 32 wherein said step of receiving request to establish said call includes the step of providing said subscriber's telephone number.

61. (New) The architecture according to claim 1, wherein at least one software terminal agent may be configured to restrict at least one of: (1) use of its associated terminal; and (2) at least one subscriber agent from pointing to the at least one software terminal agent for the purpose of establishing a communication.

62. (New) The switch according to claim 2, wherein at least one software terminal agent may be configured to restrict at least one of: (1) use of its associated terminal; and (2) at least one subscriber agent from pointing to the at least one software terminal agent for the purpose of establishing a communication.

63. (New) The medium according to claim 17, wherein at least one software terminal agent may be configured to restrict at least one of: (1) use of its associated terminal; and (2) at least one subscriber agent from pointing to the at least one software terminal agent for the purpose of establishing a communication.

64. (New) The method according to claim 32, wherein at least one software terminal agent may be configured to restrict at least one of: (1) use of its associated terminal; and (2) at least one subscriber agent from pointing to the at least one software terminal agent for the purpose of establishing a communication.